# Scientific Visualization for Large Scale Data

**S&T Campaign: Computational Sciences**
*Computing Sciences*

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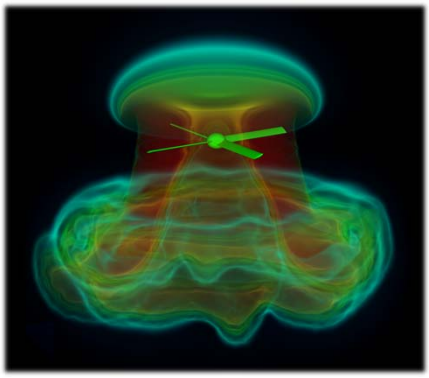
## Research Objective:

- Provide tools and expert staff to assist users with data analytics and visualization of traditional physics-based computations

ENSIGHT

ParaView
Parallel Visualization Application

VISIT



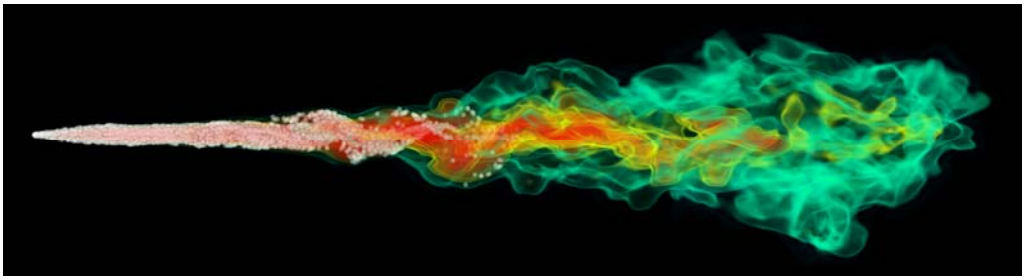
Volume Visualization of a ducted rotor (ARL/VTD)

## ARL Facilities and Capabilities Available to Support Collaborative Research

- ARL Supercomputing Research Center
- Data Analysis and Assessment Center
- Expert Staff

Collaborative Facilities

Classified Computational Facilities



Fuel Spray & Combustion (ARL/VTD)

## Challenges:

- Develop methodologies to improve capabilities to analyze HPC-sized datasets efficiently and interactively
- Advance state-of-the-art techniques to support DoD/Frontier projects


Research in Alternative Display Technology


AHPCRC HIVE Visualization Environment

## Complementary Expertise/ Facilities/ Capabilities Sought in Collaboration

- Expertise in data analytics and visualization software
- tools for physics based computations
- Application of alternative display technology to allow computational scientists deeper understanding of their results